

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

02/02/2012

Daniel Harren Assistant District Attorney, Middlesex County

Dear ADA Harren,

Enclosed is the information you requested in regards to Commonwealth vs. are copies of the following:

Included

- 1. Curriculum Vitae for Annie Dookhan, and Daniel Renczkowski.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Daniel Renczkowski analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

# <u>Curriculum Vitae</u>

## Daniel Renczkowski

## Education

Degree:

Bachelors of Science in Forensic Chemistry,

May 2005 from Buffalo State College

GPA: 3.84, Dean's List, Honor's Recognition American Chemical Society Undergraduate Award

Phi Lambda Upsilon Membership

Related Coursework: Analytical Chemistry

Organic Chemistry I and II

Biochemistry

Chemistry of Criminalistics

Anatomy

Physical Chemistry

Instrumental Chemistry. Forensics Laboratory

Physical Evidence

Physiology

# Employment

Massachusetts Department of Public Health Drug Analysis Laboratory Chemist I (October 2005 – March 2008)

Chemist II (March 2008 – present)

- -Successfully completed an eight week training course in the analysis of drugs conducted by senior staff
- -Successfully completed GC/MS training program
- -Responsible for the identification of substances to determine violation of the Controlled Substances Act of the Massachusetts General Laws
- -Responsible for maintenance and repairs of analytical instruments
- -Responsible for quality control of analytical instruments and standards

# Related Experience

Niagara County Forensics Laboratory

Forensic Internship, January 2005

- -Conducted research on the presumptive testing of saliva
- -Conducted research on the identification and detection of lubricants
- -Observed all aspects of the laboratory including drug analysis, firearms comparison, trace evidence, arson investigation, toxicology, and serology
- -Daily use of FTIR microscope and DuraSamplerII
- -Familiarized with GC/MS programs

#### Curriculum Vitae

### Annie Khan (Dookhan)

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

#### Experience:

2003 - present

### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing of the Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- \*Maintenance and repairs of analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- \*Notary Public.

2001 - 2003

## QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques for the QC Dept. and FDA.
- \*Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Courses:**

## **Department of Justice - Forensics Professionals**

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

**Evidence Analysis** 

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

## **Additional Trainings:**

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

#### Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

### PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

## The Commonwealth of Massachusetts

Executive Office of Health and Human Services Department of Public Health State Laboratory Institute

**Boston Drug Laboratory** Tel (617) 983-6622 Fax (617) 983-6625

Amherst Drug Laboratory Tel (413) 545-2601

**Boston Hours** 

Fax (413) 545-2608

8:00 - 11:002:00 - 4:00

Received by:

DRUG RECEIPT

**Amherst Hours** 9:00 - 12:001:00 - 3:00

City or Department: Name and Rank of Submitting Officer: Defendant(s) Name (last, first, initial): To be completed by Submitter To be completed by Lab Personnel. **Description of Items Submitted** Gross Weight Lab Number brownish powder

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
State Laboratory Justitute

**Boston Drug Laboratory** State Laboratory Institute **Amherst Drug Laboratory** Tel (617) 983-6622 Tel (413) 545-2601 Fax (617) 983-6625 Fax (413) 545-2608 **Boston Hours Amherst Hours** DRUG RECEIPT 9:00 - 12:00 8:00 - 11:002:00 - 4:00 1:00 - 3:00Police Reference No.: City or Department: Sheehon Name and Rank of Submitting Officer: Defendant(s) Name (last five To be completed by Submitter To be completed by Lab Personnel **Description of Items Submitted** Gross Weight Lab Number white powder

Received by: \_

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

## The Commonwealth of Massachusetts

Executive Office of Health and Human Services Department of Public Health

**Boston Drug Laboratory** State Laboratory Institute Amherst Drug Laboratory Tel (617) 983-6622 Tel (413) 545-2601 Fax (617) 983-6625 Fax (413) 545-2608 **Amherst Hours Boston Hours** DRUG RECEIPT 9:00 - 12:008:00 - 11:002:00-4:001:00 - 3:00INATON Police Reference No.: City or Department: Name and Rank of Submitting Officer: Defendant(s) Name (last, first, initial): To be completed by Submitter To be completed by Lab Personnel **Description of Items Submitted** Gross Weight Lab Number Brownish Powder Received by:

Date Analyzed: No.

City: Arlington Police Dept.

12-29-09

Officer: Inspector MIKE SHEEHAN

Def:

Amount:

1

Subst: SUB

No. Cont:

Cont: pb

Date Rec'd: 04/29/2009

No. Analyzed:

Gross Wt.:

5.10

Net Weight: 0 - 29

# Tests:

GASD

.202K

Prelim: 140100 Findings:

Heroin

Date Analyzed:

City: Arlington Police Dept.

12-29-09

Officer: Inspector MIKE SHEEHAN

Def:

Amount:

Subst: SUB

No. Cont:

Gross Wt.:

Cont: pb

Date Rec'd: 04/29/2009

5.50

No. Analyzed:

Net Weight: \- 용\

# Tests: 605

Prelim: cocause

Findings:

Cocaine

Date Analyzed:

City: Arlington Police Dept.

Officer: Inspector MIKE SHEEHAN

Def:

Subst: SUB

Amount: No. Cont:

d

Cont: pb

Date Rec'd: 04/29/2009

No. Analyzed:

Net Weight: O · 12

Gross Wt.: 3.70

#Tests: 455

· DETR

Findings: // ram

# DRUG POWDER ANALYSIS FORM

SAMPLE#AG	GENCY A-LOGIO ANALYST AND
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt ( ): 1.5579
Beinge powdra	a sussine Gross Wt ( ):
y Pro	Pkg. Wt:
	Net Wt: 0-2927
PRELIMINARY TESTS Spot Tests Cobalt	Microcrystalline Tests  Gold
Thiocyanate (+)	Chloride
Marquis +	TLTA ()
Froehde's	OTHER TESTS
Mecke's +	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS Heloin	RESULTS HOTOR
DATE 12-24-09	MS OPERATOR DSQ
	DATE 12 26 00

# DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY_ No. of samples tested:	Artingray ANALYST ADD
PHYSICAL DESCRIPTION:  White powdred to	
PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate ( +) +  Marquis  Froehde's  Mecke's	Microcrystalline Tests  Gold Chloride +  TLTA (+)  OTHER TESTS
PRELIMINARY TEST RESULTS  RESULTS (OCCIDE  DATE 12-24-05	GC/MS CONFIRMATORY TEST  RESULTS COCUMA  MS OPERATOR DS Q

# DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY G	ACLICATED ANALYST ASS
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt ( ): 0.2431
Beige posidres su	storce Gross Wt ( ):
,,,,62	Pkg. Wt:
	Net Wt: 0.1263
eta .	•
•	
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt	Gold
Thiocyanate (+)	Chloride
Marquis +	TLTA ( )
Froehde's +	OTHER TESTS
Mecke's +	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS HOWAND HENDIN	RESULTS Herois
DATE 12-24-09	MS OPERATOR DJ &
	DATE 12-75-125

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689320.D

Operator : DJR

Date Acquired : 28 Dec 2009 17:34

Sample Name : BLANK

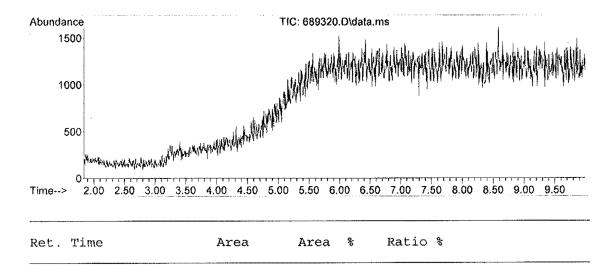
Submitted by

Vial Number : 1

AcquisitionMeth: DRUGS.M

Integrator : RTE

SDSP-12



### Area Percent / Library Search Report

Information from Data File:

File Name :  $F: \Q4-2009\SYSTEM7\12_28_09\689321.D$ 

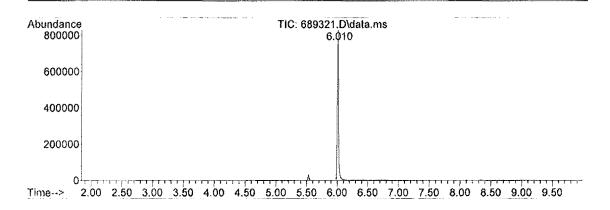
Operator : DJR

Date Acquired : 28 Dec 2009 17:47

Sample Name : HEROIN STD

Submitted by

Vial Number : 21 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.010	1186363	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689321.D

Operator : DJR

Date Acquired : 28 Dec 2009 17:47

Sample Name : HEROIN STD

Submitted by

Vial Number : 21 AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS# Qual

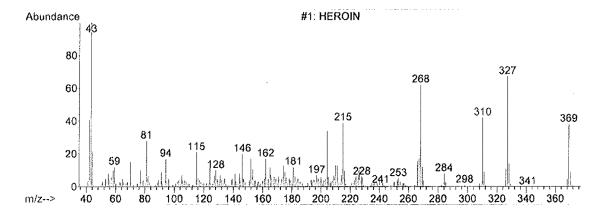
1 6.01 C:\Database\SLI.L

HEROIN

000561-27-3 99

Minimum Quality: 80

Average of 5.967 to 6.168 min.: 689321.D\data.ms (-) Abundance 43 80 327 60 268 369 310 40 204 81 146 162 115 20 28 181  $226_{238} \ 253$ 100 120 140 180 200 220 240 260 280 300 320 340 360 m/z--> 40 60 80 160

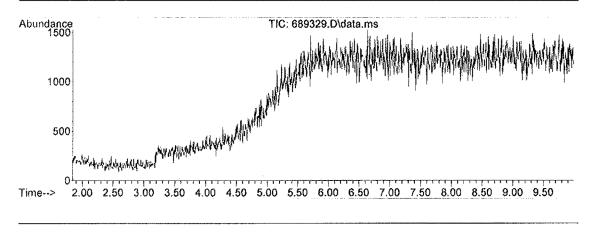


File Name :  $F:\Q4-2009\SYSTEM7\12\28\09\689329.D$ 

Operator : DJR

Date Acquired : 28 Dec 2009 19:28

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

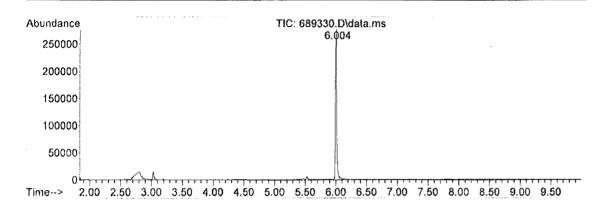
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Operator : DJR

Date Acquired : 28 Dec 2009 19:41

Sample Name :

Submitted by : ASD
Vial Number : 30
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.004	394352	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689330.D

Operator : DJR

Date Acquired : 28 Dec 2009 19:41

Sample Name : Submitted by : ASD Vial Number : 30

Vial Number : 30 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

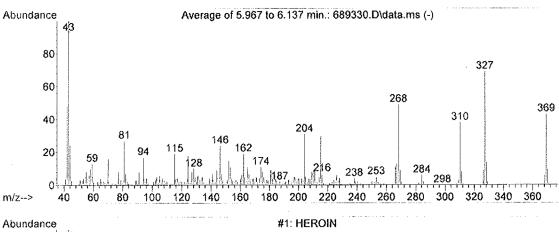
C:\Database\PMW TOX2.L

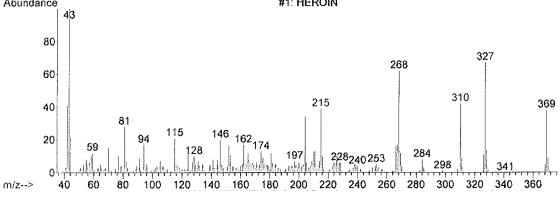
PK# RT Library/ID CAS# Qual

1 6.00 C:\Database\SLI.L

HEROIN

000561-27-3 99



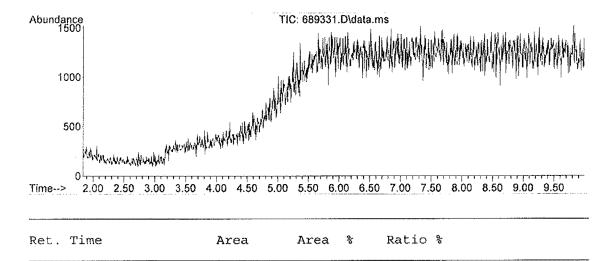


File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689331.D

Operator : DJR

Date Acquired : 28 Dec 2009 19:54

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689332.D

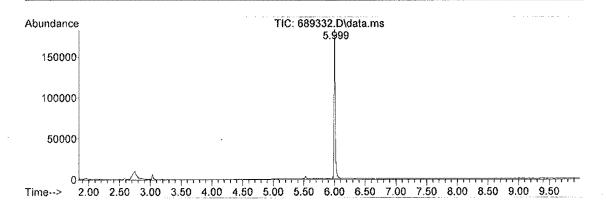
Operator : DJR

Date Acquired : 28 Dec 2009 20:06

Sample Name : Submitted by : ASD Vial Number : 32

ASD 32 DRUGS.M

AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.999	250019	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689332.D

Operator : DJR

Date Acquired : 28 Dec 2009 20:06

Sample Name : Submitted by :

Vial Number

: ASD : 32

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS#

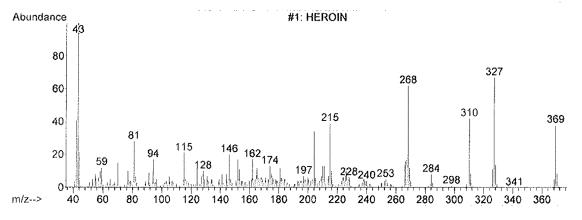
1 6.00 C:\Database\SLI.L

HEROIN

000561-27-3 87

Qual

Abundance Average of 5.962 to 6.105 min.: 689332.D\data.ms (-) 43 80 327 60 268 369 310 40 204 81 <sup>146</sup> 162 20 59 128 216 238 253 100 120 140 160 180 200 220 240 260 280 300 320 340 360 m/z--> 40 60 80



File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689338.D

Operator : DJR

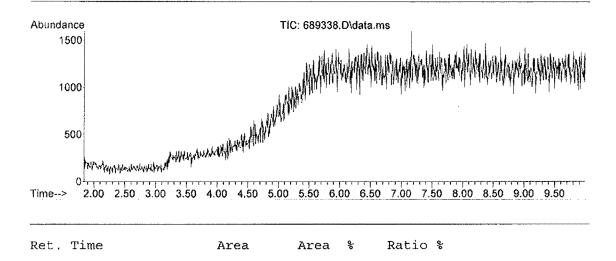
Date Acquired : 28 Dec 2009 21:22

Sample Name : BLANK

Submitted by :

Vial Number :

AcquisitionMeth: DRUGS.M Integrator : RTE



File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689339.D

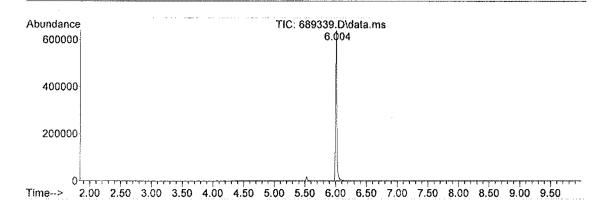
Operator : DJR

Date Acquired : 28 Dec 2009 21:35

Sample Name : HEROIN STD

Submitted by

Vial Number : 39 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.004	929802	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12 28 09\689339.D

Operator : DJR

Date Acquired : 28 Dec 2009 21:35

Sample Name : HEROIN STD

Submitted by

Vial Number : 39 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

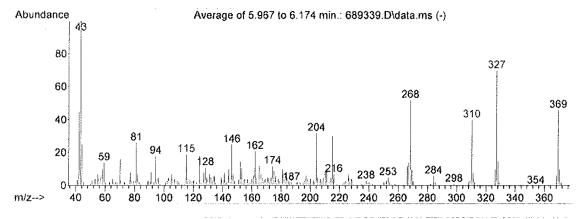
PK# RT Library/ID CAS# Qual

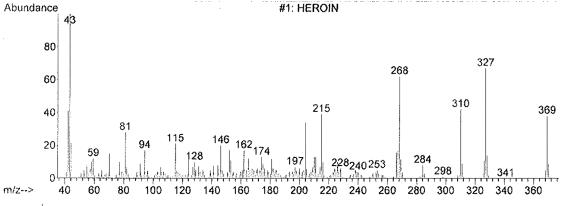
1 6.00 C:\Database\SLI.L

HEROIN

000561-27-3 94

Minimum Quality: 80





File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689363.D

Operator : DJR

DJR

Date Acquired : Sample Name :

: 29 Dec 2009 : BLANK

Submitted by

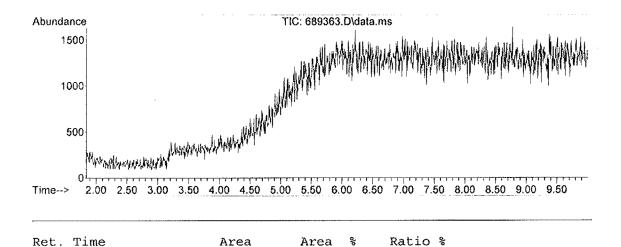
.

Vial Number

: 1

AcquisitionMeth: DRUGS.M

Integrator : RTE



2:40

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689364.D

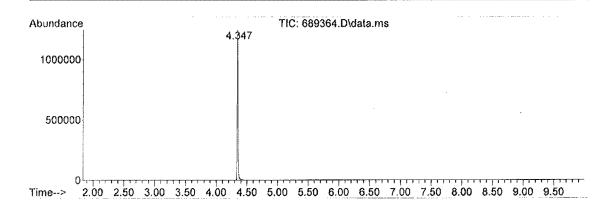
Operator : DJR

Date Acquired : 29 Dec 2009 2:53

Sample Name : COCAINE STD

Submitted by

Vial Number : 64 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.347	1165249	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689364.D

Operator : DJR

Date Acquired : 29 Dec 2009 2:53

Sample Name : COCAINE STD

Submitted by

Vial Number 64 AcquisitionMeth: DRUGS.M RTE Integrator

Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

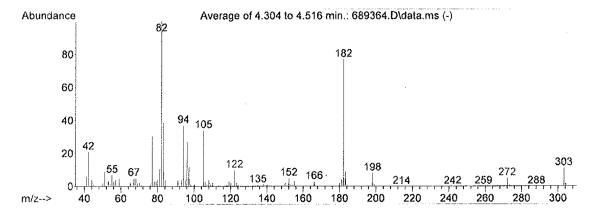
C:\Database\NIST05a.L

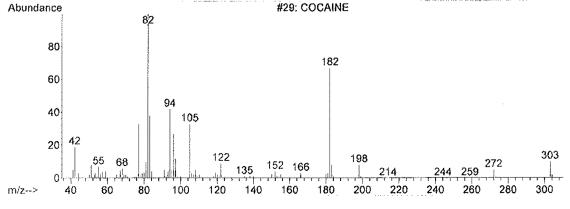
C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

C:\Database\SLI.L 1 4.35

COCAINE 000050-36-2





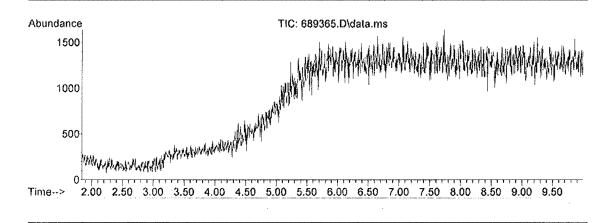
99

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689365.D

Operator : DJR

Date Acquired : 29 Dec 2009 3:05

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area 9

Ratio %

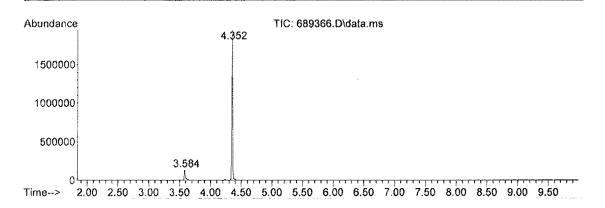
File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689366.D

Operator : DJR

Date Acquired : 29 Dec 2009 3:18

Sample Name :

Submitted by : ASD
Vial Number : 66
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.584	207864	9.56	10.57
4.352	1966314	90.44	

File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689366.D

Operator : DJR

Date Acquired : 29 Dec 2009 3:18

Sample Name :

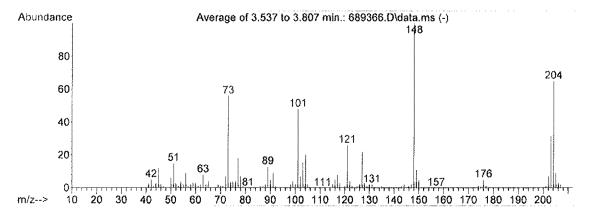
Submitted by : ASD
Vial Number : 66
AcquisitionMeth: DRUGS.M
Integrator : RTE

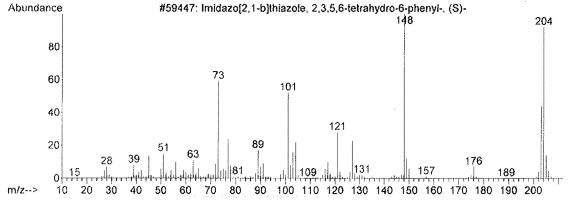
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

	PK#	RT	Library/ID		CAS#	Qual
******	1	3.58	C:\Database\NIST05a.L		03456 52 4	^^
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	98
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
			Imidazo[2,1-b]thiazole.	2,3,5,6-tet	006649-23-6	98





File Name :  $F: \sqrt{4-2009} \times \sqrt{12} = 28 \cdot 09 \cdot 689366.D$ 

Operator : DJR

Date Acquired : 29 Dec 2009 3:18

Sample Name : Submitted by : I

Submitted by : ASD
Vial Number : 66
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK# RT Library/ID

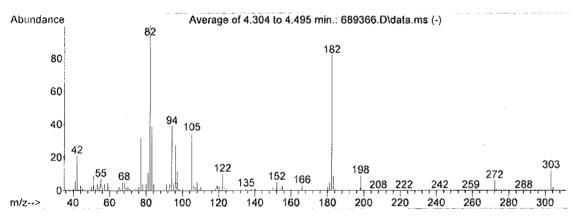
CAS# Qual

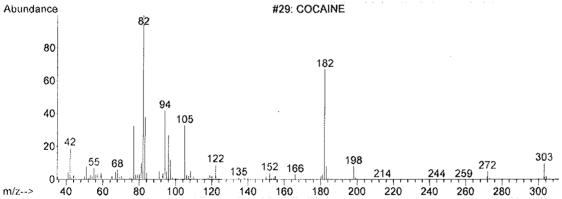
2 4.35 C:\Database\SLI.L

COCAINE

000050-36-2

99





File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689382.D

Operator : DJR

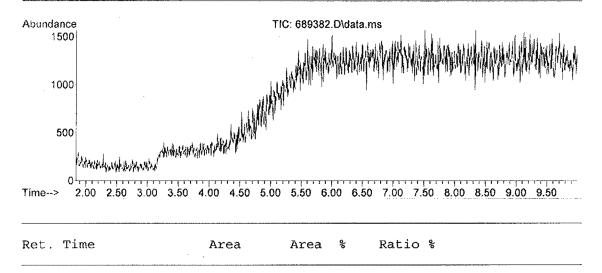
Date Acquired : 29 Dec 2009 6:41

Sample Name : BLANK

Submitted by :

Vial Number :

AcquisitionMeth: DRUGS.M Integrator : RTE



File Name : F:\Q4-2009\SYSTEM7\12\_28\_09\689383.D

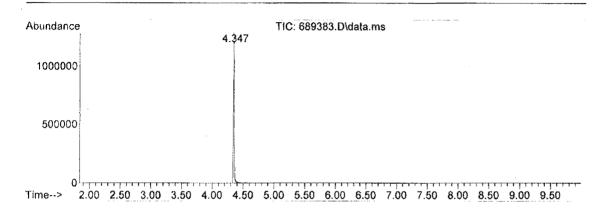
Operator : DJR

Date Acquired : 29 Dec 2009 6:54

Sample Name : COCAINE STD

Submitted by :

Vial Number : 83 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.347	1201529	100.00	100.00

File Name : F:\Q4-2009\SYSTEM7\12 28 09\689383.D

Operator : DJR

Date Acquired : 29 Dec 2009 6:54

Sample Name COCAINE STD

Submitted by

Vial Number 83 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

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